October 18, 2002

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
    Fisheries Division
    Endangered Species Coordinator
    Native Species Coordinator, Fisheries
    Water Resources Coordinator
    Bozeman Office
Montana Department of Natural Resources and Conservation
MT Environmental Information Center
Montana Audubon Council
State Historic Preservation Office
Park County Conservation District, Route 62, Box 3197, Livingston, MT 59047
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
Montana State Library, Helena
Joe Brooks Chapter, Trout Unlimited, P.O. Box 1378, Livingston, MT 59047
Frank Rigler, P.O. Box 970, Gardiner, MT 59030
J. Pojman, 2402 Knollwood, Gillette, WY 82718
W. Roberts, 162 Pleasant Lane, Belgrade, MT 59714
M. Adkins, 1076 Highway 89 South, Gardiner, MT 59030
J. & C. McPherson, P.O. Box 464, Gardiner, MT 59030
P. & K. Hayes, P.O. Box 187, Gardiner, MT 59030
Mickelson Trust, 329 W. Valerio St., Santa Barbara, CA 93101
H. & D. Rate, P.O. Box 966, Gardiner, MT 59030
R. & B. Simonson, 3761 Country Club Drive, Lewiston, ID 83501
J. & V. Kurtz, River Route Box 430, Gardiner, MT 59030
J. & D. Robidou, River Route Box 470, Gardiner, MT 59030
J. & A. Balavage, P.O. Box 513, Libby, MT 59923
B. & J. Freeland, 8 Sphinx Drive, Gardiner, MT 59030
N. & N. Castagna, River Route Box 400, Gardiner, MT 59030
G. & B. Boyd, 2447 Hidden Way, Port Angeles, WA 98362
P. & A. Wickham, P.O. Box 888, Gardiner, MT 59030
Gallatin National Forest, P.O. Box 130, Bozeman, MT 59771
C. Lyness, P.O. Box 251, Gardiner, MT 59030
Royal Teton LTD, 558 Old Yellowstone Trail S, Corwin Springs, MT 59030
L. Burgard, P.O. Box 233, Gardiner, MT 59030
H. & D. Rate, P.O. Box 966, Gardiner, MT 59030
W. & C. Wagner, Jardine Rt. Box 65, Gardiner, MT 59030

T. & D. Venable, P.O. Box 1117, Livingston, MT 59047
W. Dewing, 707 West Crawford, Livingston, MT 59047
D. Baker, 513 Neyman St., Salmon, ID 83647

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to improve in-stream flows in lower Cedar Creek, a tributary to the upper Yellowstone River located approximately 10 miles north of the town of Gardner, Montana.

Please submit any comments that you have by 5:00 P.M., November 18, 2002 to Montana Fish, Wildlife and Parks in Helena at the address listed above. Completion of this proposed project is contingent upon approval of both a "Change" application and a water use permit application by the Montana Department of Natural Resources and Conservation, as well as approval of the water lease agreement by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
e-mail: mlere@mt.state.us

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Cedar Creek Water Leasing Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 that directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established a funding account to help accomplish this goal. Additionally, the 1999 Montana Legislature amended statute sections 87-1-273, 15-38-202 and Section 5, Chapter 463, Laws of 1995 to create a bull trout and cutthroat trout enhancement program. The program calls for the enhancement of bull trout and cutthroat trout through habitat restoration, natural reproduction and reductions in species competition by way of the Future Fisheries Program.

Montana's water leasing statute (85-2-436, MCA) was enacted by the 1989 legislature as HB 707. The 1999 legislature broadened this leasing program by extending the term of the program until 2009, allowing for a longer lease term and increasing the number of stream reaches that can be leased from. This leasing program is a pilot program that allows Montana, Fish, Wildlife and Parks (MFWP) to lease water rights from willing individuals who have traditionally used the water for diversionary purposes.

Cedar Creek, a tributary to the upper Yellowstone River, provides important spawning and rearing habitat for Yellowstone cutthroat trout. This project is being proposed to replace Cedar Creek as an irrigation water source used by Mr. Frank Rigler with a small storage reservoir to be constructed on Slip and Slide Creek, an adjacent tributary to the Yellowstone River. The stored water will be passed downstream to an existing reservoir on Slip and Slide Creek and then carried to a gravity feed pipeline to serve an existing sprinkler system that irrigates approximately 52.8 acres. Additionally, a new well will be drilled near the Yellowstone River to supplement the irrigation water in times of shortage. In exchange, Rigler's headgate on Cedar Creek will be closed, no water will be diverted, the one mile long ditch will no longer be maintained and all of Rigler's water rights held on Cedar Creek will be leased to MFWP for in-stream flow for a period of 30 years (maximum time allowed by law). The intent of this project is to improve spawning and rearing habitat for fluvial Yellowstone cutthroat trout (see Figure 1).

I. Location of Project: This project will be conducted on Cedar Creek, a tributary to the upper Yellowstone River, located approximately 10 miles north of the town of Gardner within Township 8 South, Range 7 East, Section 13 in Park County (see Figure 2).

II. Need for the Project: One goal within Montana Fish, Wildlife and Parks six-year operations plan for the fisheries program is to "restore and enhance degraded habitats" by implementing habitat restoration projects and administering the Future Fisheries Improvement Program to restore important habitats on public and private lands. This proposed project would help achieve this goal.

Tributary dewatering in the upper Yellowstone drainage has been shown to be an important, if not the major factor regulating numbers of adult cutthroat trout in the Yellowstone River. Yellowstone cutthroat trout have been designated as a "species of special concern" in Montana because of shrinking distribution and declining numbers.

Cedar Creek is used by native Yellowstone cutthroat trout for spawning and rearing. However, reproduction in this reach of stream is adversely affected by seasonal dewatering from irrigation withdrawal. Increases in summer flows in lower Cedar Creek could increase recruitment of cutthroat trout to the Yellowstone River.

The intent of this proposed project is to improve in-stream flows in lower Cedar Creek to enhance spawning and rearing habitat for Yellowstone cutthroat trout. MFWP currently leases the 2nd, 3rd, 5th, 7th and 8th priority rights in the Cedar Creek drainage. This lease package results in 1.3 cfs passing the 4 lower most diversions. This new lease proposal is expected to pass an additional 1.8 to 2.8 cfs to the Yellowstone River. Ultimately, the project is intended to increase the number of adult cutthroat trout in the Yellowstone River.

III. Scope of the Project: The proposal calls for providing payment to Frank Rigler to partially cover costs associated with constructing a small storage reservoir on Slip and Slide Creek and with drilling a new well near the Yellowstone River. In exchange, Rigler's headgate on Cedar Creek will be closed, no water will be diverted, the one mile long ditch will no longer be maintained and all of Rigler's water rights held on Cedar Creek will be leased to MFWP for in-stream flow for a period of 30 years (maximum time allowed by law). This in-stream flow lease would include an early water right (4th in priority) for 3.25 cubic feet per second (cfs) and two flood rights totaling 3.76 cfs, provided that the senior downstream water rights were satisfied. The flood rights have little value for in-stream flow purposes since they only are available during spring runoff when in-stream flows are not in jeopardy. However, leasing both the high water rights and the early irrigation right insures that the diversion remains inactive, preventing entrainment of migratory fish into the irrigation canal. A lease held by MFWP since 1996 ensures that 1.3 cfs is protected for in-stream use in Cedar Creek. This new project is expected to provide an additional 1.8 to 2.8 cfs for in-stream use based on an irrigation consumption rate from about 57% to 85% (only water that is consumed can be protected for in-stream flow purposes). Two ditches on lower Cedar Creek will remain active following implementation of this project. During years of extreme drought, late summer flow in Cedar Creek may be able to only satisfy the first irrigation right of 5.5 cfs. Under this proposal, MFWP would pay $40,000.00 to Mr. Frank Rigler to lease his irrigation rights on Cedar Creek for a period of 30 years.

Although all parties have reached general agreement over this water lease, the lease cannot be implemented until a "Change in Appropriation Water Rights" application and a new water use permit are approved by the Department of Natural Resources and Conservation (DNRC). Any water user who feels they would be affected by this lease or this new water use permit has an opportunity to object to both the "Change" and the new permit. This project cannot be implemented until all objections have been resolved if, in fact, any objections are received. The lease period would begin the first complete irrigation season following the date a "Change" application is approved by DNRC. Additionally, all MFWP water lease agreements must be approved by the Fish, Wildlife and Parks Commission.

The project is expected to cost $49,000.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $40,000.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment:

1. Terrestrial and aquatic life and habitats.

Implementation of this project would provide approximately 1.8 to 2.8 cfs of additional flow in lower Cedar Creek during the irrigation season and would remove a source of fish entrainment by closing an irrigation diversion. Cedar Creek provides some of the better spawning and rearing habitat for Yellowstone cutthroat trout in the upper Yellowstone River. Ultimately, the number of adult cutthroat trout would be expected to increase in the Yellowstone River.

Construction of another storage reservoir on Slip and Slide Creek is not expected to negatively affect aquatic resources. Two reservoirs already exist on Slip and Slide Creek. The stream does not support native Yellowstone cutthroat trout nor is it accessible to spawning fish from the Yellowstone River.

2. Water quantity, quality and distribution.

No changes in drainage pattern or natural surface run-off would occur in Cedar Creek as a result of the proposed project. However, in-stream flow would increase between 1.8 and 2.8 cfs in the lower 0.5 miles of creek during the irrigation season. The hydrograph of Slip and Slide Creek would be altered as a result of the new reservoir on the stream. Some runoff in the Slip and Slide drainage would be stored in the new reservoir and released later for irrigation use. In exchange, additional water would be left in Cedar Creek for in-stream flow purposes.

Short-term increases in turbidity in Slip and Slide Creek will occur during construction of the small storage reservoir. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. The landowner will contact the Department of Environmental Quality to determine narrative conditions required to meet short-term water quality standards and protect aquatic biota. The landowner will obtain a 310 permit from the local Conservation District and the U.S. Army Corp of Engineers will be contacted for requirements needed to meet the federal Clean Water Act (404 permit).

4. Vegetation cover, quantity and quality.

Some vegetation will be disturbed during construction of the small storage reservoir on Slip and Slide Creek and during well drilling along the Yellowstone River. All disturbed areas would be re-seeded upon completion of construction. Riparian vegetation along the lower 0.5 miles of Cedar Creek would benefit by the proposed project because additional water would remain in-stream during the irrigation season, providing more water for the well being of hydrophyllic plants.

5. Aesthetics.

Aesthetics would be negatively affected during project construction because of ground disturbance and the presence of heavy equipment. In the long term, aesthetics would be enhanced by

augmenting stream flow in the lower 0.5 miles of Cedar Creek.

7. Unique, endangered, fragile, or limited environmental resources.

Yellowstone cutthroat trout are native to Montana and are classified as a "Species of Special Concern" because of their shrinking distribution and declining numbers. Tributaries are the only documented habitat that river-resident Yellowstone cutthroat trout use for spawning and rearing in the upper Yellowstone drainage. Persistent dewatering in a majority of these tributaries appears to be a leading factor regulating numbers of adult cutthroat trout in the Yellowstone River. Lower Cedar Creek is used for spawning and rearing by Yellowstone cutthroat trout. The intent of this project is to improve in-stream flows and remove a source of fish entrainment in lower Cedar Creek to improve spawning and rearing habitat for Yellowstone cutthroat trout.

8. Demands on environmental resources of land, water, air and energy.

Some run-off in the Slip and Slide drainage will be stored in the new reservoir for later irrigation use in exchange for insuring that an additional 1.8 to 2.8 cfs remain in Cedar Creek.
The new reservoir will pass stored water downstream to an existing reservoir on the creek and then carry water into a gravity flow pipeline to feed an existing sprinkler system that serves about 53 irrigated acres. This new irrigation system is expected to be considerably more efficient than the existing diversion system that relies on a leaky canal to transport water.

During times of water shortage, some additional energy will be needed to run a pump for the new well.

9. Historic and archaeological sites

Construction of the proposed reservoir project will likely require an individual Army Corp of Engineers (COE) 404 permit. Therefore, the State Historic Preservation Office will be contacted to determine the need for compliance with the federal historic preservation regulations.

VI. Explanation of Impacts on the Human Environment.

4. Agricultural or industrial production.

There are no anticipated adverse impacts to agricultural production as a result of the proposed project. The proposed exchange of Cedar Creek water with water in the Slip and Slide drainage will not change the amount of irrigated acreage.

7. Access to & quality of recreational activities.

It is anticipated that augmenting in-stream flow in lower Cedar Creek would improve overall aquatic habitat and, as a result, would improve recruitment of cutthroat trout to the Yellowstone River. The Yellowstone River supports a very popular recreational fishery.

12. Demands for energy.

Additional energy will be required to run a pump for operating the new well during times of water shortage. However, the energy requirements needed to occasionally run a well pump are not considered to be significant.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, the lower 0.5 miles of Cedar Creek will continued to be somewhat dewatered during the irrigation season. A water lease obtained by MFWP in 1996 insures that a minimum of 1.3 cfs remains in lower Cedar Creek. However, in-stream flow studies conducted by MFWP during the 1980's indicated that a flow of about 3 cfs is needed to maximize the wetted riffle area. As a result, benefits to the Yellowstone cutthroat trout population will not be not fully realized because the current minimum in-stream flow level remains insufficient. Additionally, fish will continue to be entrained and lost from the population into the irrigation canal if the headgate remains operational.

2. The Proposed Alternative

The proposed alternative is designed to augment in-stream flows in the lower 0.5 miles of Cedar Creek to better meet the minimum flow level recommended for the stream. In addition, the project will remove a source of fish entrainment in lower Cedar Creek by shutting down the headgate on the Rigler diversion. This alternative would be expected to improve spawning and rearing habitat in Cedar Creek and to increase the Yellowstone cutthroat trout population both in the stream and the Yellowstone River.

3. Alternatives considered but not recommended

Other means of increasing in-stream flows in Cedar Creek are not feasible at this time for the following reasons:

- There are no existing or planned water storage projects within the Cedar Creek drainage.
- Montana Law prevents the purchase of water rights for in-stream flows.
- To our knowledge, there are no other water rights in the Cedar Creek drainage available for leasing.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

   We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also has been reviewed and approved by the Fish, Wildlife and Parks Commission.

Before this project can be implemented, the water lease and water use permit must be approved by DNRC. MFWP will be submitting a "Change" application to DNRC that will be publicly noticed in local newspapers. Frank Rigler will be submitting an application for a water use permit to DNRC for a groundwater well that also will be publicly noticed in the local newspapers. Any objections to the "Change" or the water use permit must be resolved before approval by DNRC. These applications will be denied by DNRC if the lease or water use permit are found to adversely affect the water rights of other users in the basin.

The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA also will be published on Montana Fish, Wildlife and Parks web page: fwp.state.mt.us.

3. Duration of comment period?

Public comment will be accepted through 5:00 P.M. on November 18, 2002.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432
e-mail: mlere@mt.state.us

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Cedar Creek Water Leasing Project

Division/Bureau Fisheries Division-Future Fisheries Improvement

Description of Project This project is being proposed to replace Cedar Creek as an irrigation water source used by Mr. Frank Rigler with a small storage reservoir to be constructed on Slip and Slide Creek, an adjacent tributary to the Yellowstone River. Additionally a new well will be drilled adjacent to the Yellowstone River to supplement irrigation in times of shortage. In exchange, the Rigler headgate will be closed and all of Rigler's water rights on Cedar Creek will be leased to MFWP. The proposed project is located on Cedar Creek approximately 10 miles north of the town of Gardner.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats			X			X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture				X		
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources			X			X
8. Demands on environmental resources of land, water, air & energy			X			X
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		X
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy			X			X
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping jurisdiction Montana Department of Natural Resources and Conservation, Park County Conservation District, US Fish and Wildlife Service, US Army Corp of Engineers, Montana Department of Environmental Quality, State Historical Preservation Office

Individuals or groups contributing to this EA: Fred Nelson, private consultant

Recommendation concerning preparation of EIS: No EIS required.

EA prepared by: Mark Lere

Date: October 18, 2002

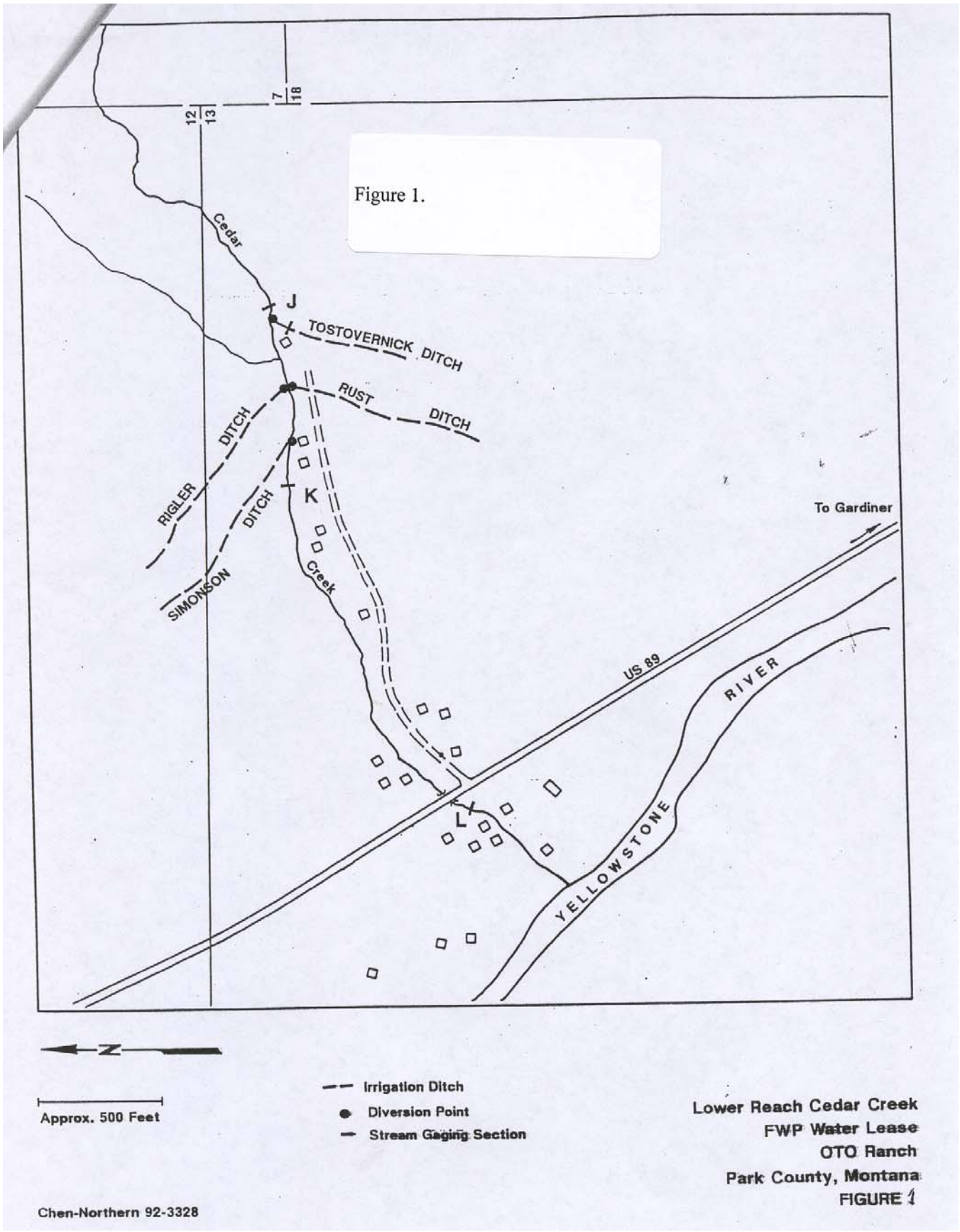
Figure 1.
12
13
17
18
Cedar
J
TOSTOVERNICK DITCH
RUST DITCH
RIGLER DITCH
SIMONSON DITCH
K
Creek
To Gardiner
US 89
RIVER
YELLOWSTONE
L
N
Approx. 500 Feet
Irrigation Ditch
Diversion Point
Stream Gaging Section
Lower Reach Cedar Creek
FWP Water Lease
OTO Ranch
Park County, Montana
FIGURE 1
Chen-Northern 92-3328

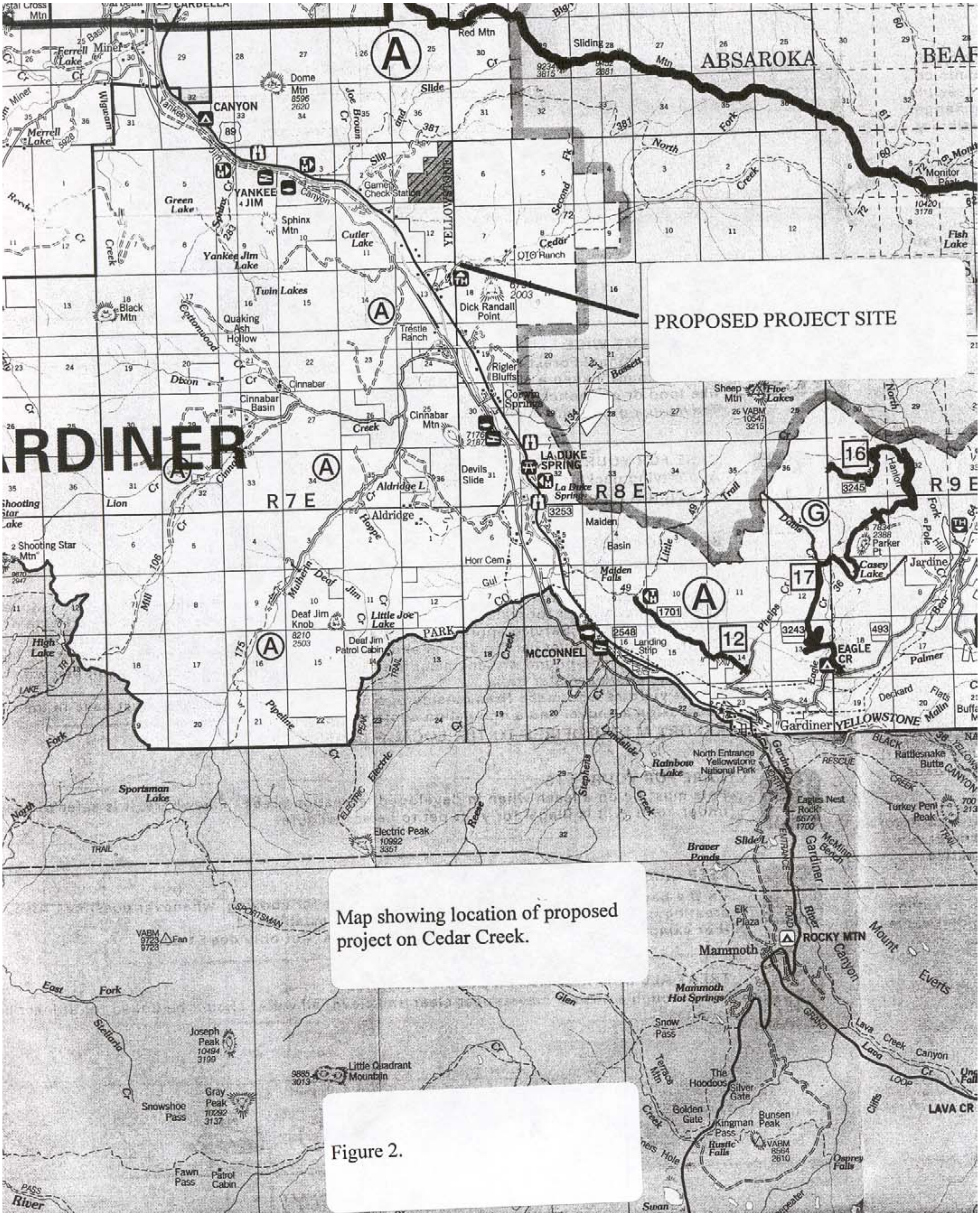
PROPOSED PROJECT SITE
ABSAROKA
GARDINER
R 7 E
R 8 E
R 9 E
CANYON
YANKEE JIM
Dome Mtn
Sphinx Mtn
Cutler Lake
Yankee Jim Lake
Twin Lakes
Black Mtn
Quaking Ash Hollow
Cinnabar
Cinnabar Basin
Cinnabar Mtn
Dick Randall Point
Trestle Ranch
Rigler Bluffs
Corwin Springs
LA DUKE SPRING
Devils Slide
Aldridge
Aldridge L
Maiden Basin
Horr Cem
Deaf Jim Knob
Little Joe Lake
Deaf Jim Patrol Cabin
MCCONNEL
Landing Strip
Gardiner
EAGLE CR
Casey Lake
Parker Pt
Jardine
Palmer
Sheep Mtn
Five Lakes
Red Mtn
Sliding Mtn
OTO Ranch
Cedar
Green Lake
Merrell Lake
Ferrell Lake
Shooting Star Mtn
High Lake
Electric Peak
Sportsman Lake
Rainbow Lake
North Entrance Yellowstone National Park
Eagles Nest Rock
Beaver Ponds
ROCKY MTN
Mammoth
Mammoth Hot Springs
Elk Plaza
Snow Pass
The Hoodoos
Silver Gate
Golden Gate
Kingman Pass
Bunsen Peak
Rustic Falls
Osprey Falls
Joseph Peak
Gray Peak
Snowshoe Pass
Fawn Pass
Little Quadrant Mountain
Turkey Pen Peak
Rattlesnake Butte
LAVA CR
Monitor Peak
Fish Lake
Map showing location of proposed project on Cedar Creek.

Figure 2.